

### Remarks/Arguments

Claims 13, 14, 16, 25, and 26 have been amended.

#### **Rejection under 35 U.S.C. § 112**

In the Office Action, the Examiner rejected claim 13 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, the Examiner felt that something was left out of the first line, which recites "... barrier comprises of a...." Accordingly, Applicant has deleted the word "of" from claim 13; therefore, this rejection is moot.

#### **Rejections under 35 U.S.C. § 102**

In the Office Action, the Examiner rejected claims 1-4, 6-9, 11-13, 16-18, and 20-23 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,225,676 to Hattori et al. ("*Hattori*"). Applicant respectfully requests reconsideration of this rejection for at least the following reasons.

As to claim 1, claim 1 recites, among other things,

a semiconductor device formed on a conductivity region; and  
a low resistive path barrier formed surrounding the conductivity region to isolate the conductivity region from a substrate that supports the conductivity region and the low resistive path barrier.

\*Underline added.

In the Office Action, the Examiner alleges that *Hattori* anticipates original claim 1. In particular, the Examiner states that, among other things, that "*Hattori* et al. show a structure and a method of forming the structure (see cover Figure) a semiconductor device 16 in a region 13 and a low resistance barrier 12, 22 which isolated the device." See Office Action, page 2, underline added. Applicant respectfully disagrees with this interpretation of *Hattori*. In particular, Applicant submits that reference 12 of *Hattori* is in fact, a portion of the substrate and is **not** a low resistive path barrier surrounding the

conductivity region (the substrate supporting both the low resistive path barrier and the conductivity region). This interpretation of *Hattori* is supported, in part, by the fact that the Examiner himself appears to recognize that **reference 12 of *Hattori* is a substrate rather than a low resistive path barrier** when rejecting claim 7. See page 3 of the Office Action, “[w]ith respect to claim 7, the **substrate 12** is a p-type,” bold added. Therefore, *Hattori* **does not** disclose “a low resistive path barrier formed surrounding the conductivity region to isolate the conductivity region from a substrate that supports the conductivity region and the low resistive path barrier.” Underline added. For at least these reasons, Applicant submits that claim 1 is not anticipated by *Hattori*.

Independent claim 16 has similar features as claim 1. Therefore, for at the same reasons that claim 1 is patentable over *Hattori*, claim 16 is likewise patentable over *Hattori*. Claims 2-4, 6-9, 11-13, 17-18, and 20-23 depend from and add additional features to claims 1 and 16, respectively. Therefore, by virtue of their dependency, claims 2-4, 6-9, 11-13, 17-18, and 20-23 are also patentable over *Hattori*.

### **35 U.S.C. § 103 Rejection**

In the Office Action, the Examiner rejected claims 5, 10, 14, 19, 24, and 28-30 under 35 U.S.C. § 103(a), as being unpatentable over *Hattori* in view of U.S. Patent No. 6,831,346 to Li et al. (“*Li*”). Applicant respectfully requests reconsideration of this rejection for at least the following reasons.

Claims 5, 10, 14, 19, 24, and 28-30 depend from and add additional features to independent claims 1, 16, and 25, respectively. The deficiencies of *Hattori* as described above for independent claims 1 and 16 (as well as for independent claim 25, which includes similar features of claims 1 and 16) are not cured by the teachings of *Li*. Therefore, for at least these reasons, claims 5, 10, 14, 19, 24, and 28-30 are patentable over *Hattori* in view of *Li*.

The Examiner rejected claims 15 and 25-27 under 35 U.S.C. § 103(a) as being unpatentable over *Hattori*. In particular, the Examiner states that with respect to claim 15, it would have been “a matter of routine experimentation to determine the best depth

for isolating such a device,” with respect to claim 25, “it would have been obvious to use any circuitry with such a device structure including a bus and a network, and with respect to claims 26 and 27, the features of claims 26 and 27 are allegedly disclosed in *Hattori*. Applicant respectfully requests reconsideration of this rejection for at least the following reasons.

As to independent claim 25, claim 25 recites features similar to those of independent claims 1 and 16. Therefore, Applicant submits that for at least the same reasons that claims 1 and 16 are patentable over *Hattori*, claim 25 is patentable over *Hattori* in view of what the Examiner alleges as being obvious.

Claims 15, 26, and 27 depend from and add additional features to independent claims 1 and 25, respectively. Therefore, by virtue of their dependency, claims 15, 26, and 27 are also patentable over *Hattori* in view of what the Examiner deems as being “a matter of routine experimentation” or as being “obvious.”

**Conclusion**

In view of the foregoing, the Applicant respectfully submits that claims 1-30 are in a condition for allowance. Early issuance of Notice of Allowance is respectfully requested.

If the Examiner has any questions, he is invited to contact the undersigned at (503) 796-2099.

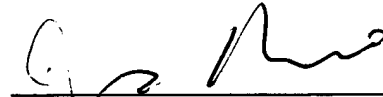
The Commissioner is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 500393.

Respectfully submitted,  
SCHWABE, WILLIAMSON & WYATT, P.C.

Dated: \_\_\_\_\_

6/13/05

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